

**EASTERN RED-FOOTED FALCONS *FALCO AMURENSIS* AND RED-FOOTED FALCON *F. VESPERTINUS* IN SOMALIA AND ETHIOPIA**

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We follow Stresemann & Amadon (1979) in regarding the Eastern Red-footed or Amur Falcon *Falco amurensis* as being distinct from the Red-footed Falcon *F. vespertinus*. This policy has been followed previously by some authors, for example White (1965), without comment, and Moreau (1972), who added that they were allopatric and that the differences between the two were greater than would normally be regarded as subspecific, and that there are no reports of interbreeding. The Amur Falcon, as we prefer to call it, breeds from Lake Baikal eastwards to the Pacific and southwards to northern China (Moreau 1972), and overwinters in east tropical Africa south to Cape Province and west to northern Namibia (Brown *et al.* 1982). *F. vespertinus* breeds westwards from Lake Baikal, mostly between 50° and 60°E across Asia north of the Caspian and Black Seas into western Europe.

**STATUS IN ETHIOPIA AND SOMALIA****Ethiopia**

Urban & Brown (1971) describe *vespertinus* as a passage migrant in Western Ethiopia in September–October and March–April, possibly frequent, and *amurensis* as a passage migrant, possibly in October and March, in northeast Ethiopia. In an exhaustive search of the literature we were able to trace only a single record of *F. vespertinus* and not one of *amurensis* in the whole of Ethiopia, and JSA failed to see either species during wide travels in the country in 1969–1977. In the Sudan adjoining Western Ethiopia there are no records east of the Nile valley (Nikolaus 1987). Vittery (1975, 1983) recorded a male flying north at Lake Langan (7°35N, 38°45E) in the Rift Valley on 26 April 1975, but the observation is unsupported by details of identification. Later in the same year, G. Nikolaus (*in litt.*) reported a bird from the Afdera River (9°32N, 41°00E), also in the Rift Valley, on 29 September to 1 October 1975 which he considered to be this species, but his description is not entirely convincing.

**Somalia**

There are no records of *vespertinus* and only one old record, of two *amurensis*, collected at Obbia (5°21N, 48°32E) in January 1931 (Moltoni 1935, 1936). However, on 24 November 1978 there were two *amurensis* all day, joined by seven more in the evening, on the coast at Gezira (1°56N, 45°11E). On 13 April 1979 we encountered quite large numbers between Balad (2°21N, 45°11E) and Jiohar (2°47N, 45°30E), also in southern Somalia, associated with an immense passage of Eurasian Rollers *Coracias garrulus* (Ash & Miskell 1980). We made five separate observations on this day, as follows:

- a. 13 km north of Balad: c. 100 small falcons comprising 50 male and 30 female *amurensis*, c. 10 Lesser Kestrels *F. naumanni*, 5 Kestrels *F. tinnunculus* and 5 Hobbies *F. subbuteo*, with c. 100 Eurasian Rollers feeding on termites.
- b. 30 km south of Jiohar: several small parties of small falcons, mostly *amurensis*, flying ENE with Eurasian Rollers.

- c. 24 km south of Jiohar: 20 *amurensis* flying NE.
- d. 14 km south of Jiohar: 15 *amurensis* catching termites.
- e. 11 km south of Jiohar: 25 *amurensis* flying NE at dusk.

In the same area where the birds were seen in the spring of 1979 at least ten were watched on 17 April 1981 at 11 km south of Balad. Shortly afterwards, three falcons, almost certainly *amurensis*, accompanying a group of raptors which consisted of 1 *subbuteo*, 25 *tinnunculus* and 5 Swallow-tailed Kites *Chelictinia riocourii* were feeding aerially over open ground on 28 April 1981 near Bergadid (5°04N, 45°20E) in the west of the country close to the Ethiopian border.

### MIGRATION OF FALCON AMURENSIS

Moreau (1972) described the migration as "the most extraordinary of all those under discussion", and Brown & Amadon (1968) remarked that in its journey of 6000–7000 miles it "possibly performs the most remarkable migration known in any bird of prey." The present indications are that the main bulk of Amur Falcons leave their breeding quarters, between Lake Baikal and Korea, pass through Assam south of the Himalayas and leave western India between 14° and 16°N in the area of Goa on a long flight, of at least 3000 km across the Indian Ocean, in the north-east monsoon between November and January.

Apparent arrival localities along the east African seaboard range from Obbia in the north at c. 5°N to Pemba Island at 5°S. Inland movements, such as the large southerly movement in January at Dodoma (6°11S, 35°45E) in Tanzania (Britton 1980) suggest arrival of birds at some point north of 5°S. Records of single immature birds near Aden on 25 November 1984 (Ash in prep.) and at Muscat, also on 25 November (year not given, Meinertzhagen (1954)), although being further north, still fit in well with the timing of this westerly movement.

As far as is known the world population, estimated by Moreau (1972) as possibly numbering 4.5 million, overwinters in Africa, and if as seems likely after crossing the Indian Ocean they pass over the African coast between 5°N and 5°S it is remarkable that there are only four records of presumed new arrivals on the coast (at Obbia and Gezira in Somalia, Bamburi (4°00S, 39°43E) in Kenya, and Pemba (5°10S, 39°48E) in Tanzania). This strongly suggests that birds are passing over unseen high overhead, many probably at night, and continuing inland. From a total of over 70 records that we have traced in Somalia, Uganda, Kenya and Tanzania, 38 can be dated to the immigration period in November–January, but only five of them refer to more than 100 birds, the highest being 1000+ (once). Thus this large mass of birds is passing through virtually unseen. In their final winter quarters further south 5000, and even up to 100 000, have been seen together (Moreau 1972). These observations strongly suggest that Amur Falcons not only cross the Indian Ocean in an uninterrupted flight, but that many of them continue non-stop as far as Malawi and Zambia.

Their late arrival in November–January results from the timing of their trans-oceanic flight to coincide with the N.E. monsoon, and practically all Amur Falcons are absent from East Africa after January. The few records there in February are from southern Tanzania

and presumably, like some of the January records, are birds within the northern limit of their final winter range.

Return passage takes place more rapidly, in March and April, and observations in Africa fall within the same area as the autumn birds, except that there are a few more records to the north and west. The reverse migration takes place in similar conditions to those in autumn, except that the following wind is now from the S.W. monsoon. There is no reason to assume the "massive descent" expected by Moreau (1972) or to suppose that the absence of records on the Indian seaboard in spring is any more unexpected than are the few records on the African coast in autumn. Nevertheless, the route back from eastern Africa in spring is still not known.

The extraordinary record by Meinertzhagen (1954) of 100 Amur Falcons, of which he shot a pair, near Mecca on 6 April 1948, is difficult to understand. Moreau (1972) suggested that the falcons may have been "seduced" into being diverted off-course by the presence of breeding locusts in the Red Sea area, although it is difficult to understand how their influence might have been exerted over a distance of many hundreds of kilometres from the most northerly record of *amurensis* in Africa at Obbia.

We have discussed elsewhere (Ash & Miskell 1980) the migration of Eurasian Rollers with which the falcons were associated on 13 April 1979, and whose onward passage is not understood either. Several possibilities exist which might equally well apply to Amur Falcons:

- a. the birds may have been heading towards the coast along which they might proceed to a short sea-crossing at Cape Guardafui.
- b. the birds may have been heading for a direct long-distance crossing of the Indian Ocean (although this seems unlikely at this latitude before the S.W. monsoon is established).
- c. they may have been diverted from their original track towards the large rainstorms on 13 April where there would be insects in the upwelling air ahead of the rain.

Amur Falcons deposit large reserves of pre-migratory fat (Moreau 1972) and are thus able to travel great distances non-stop. They are also aerial feeders, as are the rollers, so can exploit any available food sources, particularly airborne locusts and termites, whilst on migration.

We suspect that the main exodus of falcons in spring may leave Africa from the same area at which they arrived four to five months earlier, at very high altitude, not necessarily on a narrow front, and perhaps mainly to the south of Somalia. Further south in April the westerly wind will be firmly established, but possibly some birds find they are ahead of the wind-change zone and become 'trapped' by the easterly head winds further north, and thus continue overland in a north-easterly direction, rather than face a long oversea flight in a head wind. This might account for the birds in western Arabia, and possibly even for those found in Somalia. Whichever is the case, it is indeed remarkable that a migration which must involve millions of birds is so poorly understood.

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